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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/581,884

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Son Nguyen Kim

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EXAMINER

NGUYEN, VU ANH

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

11/10/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/581,884	KIM ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Vu Nguyen	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 33-67 is/are pending in the application.
- 4a) Of the above claim(s) 43,45-55 and 62-67 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 33-42,44 and 56-61 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>06/06/2006</u> .  | 6) <input type="checkbox"/> Other: ____.                          |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 33-61, drawn to a composition.

Group II, claim(s) 62-65, drawn to coating material.

Group III, claim(s) 66-67, drawn to an article.

2. The inventions listed as Groups I-III do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: The claimed composition is taught in WO02/38638 (note: US 7,015,294 B2 is being relied upon as an English equivalent of WO02/38638). Thus, for example, the prior art teaches a cosmetic composition comprising a polymer and a cosmetically acceptable carrier, wherein the polymer is a copolymer comprising tert-butyl acrylate, acrylic acid and/or methacrylic acid, and a mixture of ethyl acrylate and N-tert-butylacrylamide (last portion of col. 4).

3. This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

Each of claims 43-55 presents a different species of the generic invention.

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

4. The claims are deemed to correspond to the species listed above in the following manner:

Each of claims 43-55 presents a different species of the generic invention.

The following claim(s) are generic: claim 1.

5. The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the reasons set forth above.

6. During a telephone conversation with Georg Hasselmann on 10/28/2009 a provisional election was made with traverse to prosecute the invention of Group I, claims 33-61, and the species of claim 44. Affirmation of this election must be made by applicant in replying to this Office action. The two groups of claims (43 and 45-55) and (62-67) are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to non-elected species and non-elected inventions, respectively.

7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

**Claims 33-42, 44 and 56-61 are the elected claims and will now be examined on the merits.**

***Specification***

8. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

***Claim Objections***

9. Claim 59 is objected to because of the following informalities: The recitation of the compositions should be in the alternative; that is, the "and" preceding the last species should be changed to an "or". Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 33-42, 44, and 56-61 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

12. First, the phrase "copolymer obtainable by free radical polymerization" in claim 33 is indefinite as it is unclear whether copolymers obtained by other methods such as anionic polymerization are also encompassed. If only copolymer obtained by free radical polymerization is intended, then "obtainable" should be replaced with "obtained".

13. Second, each of claims 33 and 56 recites a broad range followed by a narrower range. A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 33 recites the broad recitation "a) tert-butyl acrylate and/or tert-butyl methacrylate", and the claim also

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recites "wherein the component a) comprises tert-butyl acrylate or consists thereof" which is the narrower statement of the range/limitation. Likewise, claim 56 recites "ii) water-miscible organic solvents", and also recites "preferably C<sub>2</sub>-C<sub>4</sub>-alkanols, in particular ethanol". That is, a broad limitation is followed by a narrower limitation which is in turn followed by an even narrower limitation.

14. Third, each of claims 36, 37, 40 and 44 recites polymerized units where any connection of the polymerized units with the polymer of claim 33 is ambiguous. For example, claim 36 recites "The composition according to claim 33, further comprising methacrylic acid incorporated in the form of polymerized units as component d)". Thus, it is unclear whether claim 36 recites a poly(methacrylic acid) to be added to the composition of claim 33 or it is intended to mean that the monomer mixture of claim 33 further comprises methacrylic acid. Another example is claim 44, which recites "The composition according to claim 33, which consists of repeating units of...". It is not clear if these repeating units have any connection at all with the polymer of claim 33.

15. Finally, claim 61 depends on claim 28, which has been cancelled. In the followings, claim 61 is taken to be dependent on claim 33.

### ***Claim Rejections - 35 USC § 102***

16. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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17. Claims 33-36, 40-42 and 56-61 are rejected under 35 U.S.C. 102(b) as being anticipated by Dausch et al. (WO02/38638). *Notes: US 7,015,294 B2 is being relied upon as an English equivalent of WO02/38638.*

18. Corresponding to the limitations set forth in these claims, Dausch et al. discloses a cosmetic composition comprising a polymer and a carrier (col. 5, lines 9-34), wherein the polymer is obtained by radical polymerization of a monomer mixture comprising tert-butyl acrylate and/or tert-butyl methacrylate, acrylic acid and/or methacrylic acid, and at least one other comonomer (Abstract). The at least one other comonomer includes, in one embodiment, a mixture of ethyl acrylate and N-tert-butylacrylamide. Consequently, the polymer includes one comprising tert-butylacrylate, N-tert-butylacrylamide, ethyl acrylate, acrylic acid and methacrylic acid. Such polymer reads on the polymer of claims 33-36. Further, since the ethyl acrylate can be replaced with ethyl methacrylate (col. 4, lines 45-48), the prior art does include embodiments where the ethyl acrylate is replaced with ethyl methacrylate. The resulting polymer reads on the polymer of claims 40-42. Claim 56 is taught in col. 5, lines 29-34; claim 57 in col. 7, lines 25-35; claim 58 in col. 5, lines 31-34; claim 59 in col. 5, lines 9-25; claims 60 and 61 in col. 5, lines 35-46.

19. Claims 33-40 and 56-61 are rejected under 35 U.S.C. 102(b) as being anticipated by Kim et al. (WO01/62809). *Notes: US 2003/0147929 A1 is being relied upon as an English equivalent of WO01/62809.*

20. Corresponding to the limitations set forth in these claims, Kim et al. discloses a cosmetic composition comprising a polymer and a carrier [0198-0202], wherein the



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polymer is obtained by radical polymerization of a monomer mixture comprising monomer components a), b), c) and d) (Abstract). Component a) includes a mixture of tert-butyl (meth)acrylate and N-tert-butyl (meth)acrylamide [0052]. Component b) includes N-vinylamides and N-vinylactams [0054-0055], which read on the species recited in claim 40. Component c) includes the species recited in claims 37-39 [0057-0072]. Component d) includes acrylic acid, methacrylic acid and mixture thereof [0088-0090]. Thus, the prior art includes polymers that read on the polymers of claims 33-40 [0129-0133]. Claim 56 is taught in paragraph [0201]; claims 57 and 59 in [0202]; claims 58-61 in [0198].

### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vu Nguyen whose telephone number is (571)270-5454. The examiner can normally be reached on M-F 7:30-5:00 (Alternating Friday Off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on 571-272-1114. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Vu Nguyen  
Examiner  
Art Unit 1796

/David Wu/  
Supervisory Patent Examiner, Art Unit 1796